

METROPOLITAN
TRANSPORTATION
COMMISSION

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John Kriken

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Sharon Wright Sonoma County and Cities

Harry Yahata State Business. Transportation and Housing Agency

> Lawrence D. Dahms Executive Director

William F. Hein Deputs Executive Director BAY BRIDGE DESIGN TASK FORCE Engineering and Design Advisory Panel Workshop to Review Alternatives Monday, June 2, 1997 1:00 p.m. Port of Oakland Board Room 530 Water Street, Oakland

AGENDA

- Welcome and introductions -- Chair Joseph Nicoletti and Vice Chair John Kriken
- 2. Approval of draft meeting record of May 12-14 workshop* -- Steve Heminger, MTC
- 3. Presentation on additional information requested by EDAP Denis Mulligan, Caltrans
- 4. Further discussion and deliberations by EDAP
- 5. Other business/Public comment

6. Next meeting:

Monday, June 16, 1997

1:00 p.m.

Port of Oakland Board Room

*Attachment

<u>Public Comment</u>: The public is encouraged to comment on agenda items at committee meetings by completing a request-to-speak card (available from staff) and passing it to the committee secretary or chairperson. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Record of Meeting: MTC meetings are tape recorded. Copies of recordings are available at nominal charge, or recordings may be listened to at MTC offices by appointment

<u>Sign Language Interpreter or Reader</u>: If requested three (3) working days in advance, sign language interpreter or reader will be provided; for information on getting written materials in alternate formats call 510/464-7787.

(PI-Share/Bay Bridge/EDAP/EDAP agenda 6/2)

BAY BRIDGE DESIGN TASK FORCE Engineering and Design Advisory Panel Workshop to Review Alternatives Waterfront Plaza Hotel, Oakland May 12-14, 1997

Draft Record of Meeting

Panel Attendance

Joseph Nicoletti (Chair), John Kriken (Vice Chair), Karen Alschuler, Christopher Arnold, Bruce Bolt, Roger Borcherdt, Robert Brown, Jerry Fox, John Hall, Jeffrey Heller, Ephraim Hirsch, I.M. Idriss, Manabu Ito, T.Y. Lin, Patrick Lucia, Jim McCarty, Roumen Mladjov, Klaus Ostenfeld, Joseph Penzien, Alexander Scordelis, Chuck Seim, Frieder Seible, Jiri Strasky, Peter Taylor, Steve Thompson, Edward Wilson, Thomas Wosser, and Y.C. Yang.

Disclosure of Interests

Chair Nicoletti and Vice Chair Kriken opened the meeting with a statement of purpose and ground rules for conducting the meeting. Following self-introductions, members of the panel publicly indicated by raising their hand if they had participated in the preparation of any of the presentations to be made during the workshop or if they planned to participate on any team which may subsequently submit a proposal to Caltrans to perform design and engineering services on the east span replacement project.

Presentation of Proposals

On May 12 and 13, the panel heard presentations on bridge design proposals from the following firms and individuals:

OPAC Consulting Engineers
Lin Tung-Yen China, Inc.
URS Greiner
Parsons Brinckerhoff
Astaneh-Black
Michael Longo
Caltrans
Gerwick/Sverdrup/DMJM
Coman Feher
TY Lin, Intl.
DCM Studios
Garrett Green
Zhong-Lin-Hsue

Evaluation of Proposals

On May 14, the panel evaluated the proposals it had received and, after discussion, rejected the following bridge design types for engineering, design, visual, and other technical reasons:

- Floating Bridge
- Hybrid Cable Stayed/Arch Bridge
- Free Form Modified Arch Bridge
- Steel Arch (Above Deck) Bridge
- Segmental Concrete Arch Bridge
- Single Tower (Tetrapod) Suspension Bridge
- Repeating Spans of Cable Stayed Bridge
- Repeating Spans of Self-Anchored Suspension Bridge
- Double Tower Cable Stayed Bridge

After further deliberation, the panel accepted the following bridge design types for additional study:

- Single Tower* Cable Stayed Bridge
- Single Tower* Curved Cable Stayed Bridge
- Single Tower* Self-Anchored Suspension Bridge
- Viaduct (Skyway)

The panel requested that Caltrans provide the following additional information regarding the accepted bridge design types at the panel's June 2 or June 16 meetings:

- seismic performance
- cost
- constructibility
- geological information
- alignment: north or south
- navigation: vertical and horizontal clearance
- visual simulation

^{*}Single Tower as it appears in longitudinal elevation

The panel also reached consensus on the following additional recommendations regarding attributes of the accepted bridge design types:

- 1. The east span bridge should not be double decked. It should have two parallel separated decks on the causeway section and either parallel separated decks or a single deck on the suspended span. (Caltrans will consider two options for preliminary estimates a widely separated structure and a closely separated structure with a beam linking the two columns.)
- 2. The causeway section should have long, equal span lengths, although closer span lengths might be necessary just adjacent to the Oakland shore.
- 3. The causeway section should be supported by single column piers with particular attention paid to the design of the pier as it enters the water, including the possibility of submerging the pile cap below water.
- 4. Any cable or suspension tower included on the east span should be no taller than the suspension towers on the existing west span.
- 5. The "diamond" shape for the tower base should not be employed in any cable or suspension tower on the east span.
- 6. The east span bridge should have a dedicated bicycle/pedestrian facility.

Public Comment

The following members of the public made comments during public coment periods of the workshop:

May 12 John Bliss, Bill Smith, Michael Longo, Dan Breuner

May 13 Y.S. Chang

May 14 Abolhassan Astaneh-Asi, Martin Iorns

BAY BRIDGE DESIGN TASK FORCE Engineering and Design Advisory Panel June 2, 1997 Meeting Port of Oakland

Draft Record of Meeting

Panel Attendance

Joseph Nicoletti (Chair), John Kriken (Vice Chair), Karen Alschuler, Roger Borcherdt, Robert Brown, Jerry Fox, Ben Gerwick, Jeffrey Heller, Ephraim Hirsch, I.M. Idriss, T.Y. Lin, Jim McCorty, Joseph Penzien, Alexander Scordelis, Chuck Seim, Frieder Sieble, Peter Taylor, Steve Thompson, Edward Wilson, Thomas Wosser, and Y.C. Yang.

Meeting Record of May 12-14 Workshop

EDAP approved the draft meeting record after deleting a reference to single column piers for the causeway section of the new eastern span. (Approved record of meeting is attached.)

Caltrans Presentation on Additional Information

EDAP received additional oral and written information from Caltrans on issues relating to navigation, geology, alignment, seismic performance, and cost of the four design types accepted for further consideration at the May 12-14 workshop. EDAP requested that Caltrans present further information related to seismic performance, cost, and visual simulation at the next EDAP meeting on June 16.

Further Deliberations by EDAP

EDAP also received a report dated May 30, 1997 from the Caltrans Advisory Panel on Conceptual Designs, composed of some members of EDAP, which reviewed the four bridge design types. The EDAP approved one of the report's recommendations that the single inclined tower curved cable stayed bridge not be considered further due to (1) uncertainties regarding its seismic performance, (2) lack of experience with this type of structure, and (3) no firm engineering support information being available at this time.

Public Comment

The following members of the public made comments during the public comment period:

Abolhassan Astaneh-Asi, R. Gary Black, John Bliss, and Paul Gulbenkian

Bay Bridge Design Task Force Engineering & Design Advisory Panel June 2, 1997 - 1 p.m.

Public Sign-in Sheet

NAME	REPRESENTING -	ADDRESS
1. Mari Carlan	Office of Mayor Harr	is spell to
2. Hana Astanta	OC Berkely	
3. Larry Rowland	RMC Lonester	
4. Stans Hearne	EE SP	
5. DARYCE BAILEY	MOFFATT & NICHOL ENSRS	
6. PAFAEL MA WZA NAREZ	TY L'u Int	
7. Al Ely	M*N	
8. Sajid Abban	TYLI	
9. Bol M Clony	Contra Costa TA	
10. Ade Akinsanya	Caltrans	
Section/LPA/SFOBBalgn-In		Page of

PRESS Bay Bridge Design Task Force Engineering & Design Advisory Panel June 2, 1997 - 1 p.m.

NAME	KEPRESENTING	
1. HIRER OLMER	T.Y. LIN INTERNATIONAL	
2. CARL NOLTE	St Chamica	
3. Robert Oakes	Contra Costa Times	
4. Kanding	PBQ\$D	
5. FOREY HAVILOND	BBAIA	
6. Vances Dintelopel	San Jose Mercury Wews	
7. PROVUA ABRAMSON	OAK THB	
8. PAFGE MAN		
9.		
10.		

Section/LPA/SFOBBsign-in

Page ____ of ___